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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/517,230	03/02/2000	John Y. Chen	39	4349

7590                    06/17/2002  
Applied Elastomeric Inc  
163 W Harris Avenue  
South San Francisco, CA 94080

EXAMINER

TAMAI, KARL I

ART UNIT                    PAPER NUMBER

2834

DATE MAILED: 06/17/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/517,230	CHEN, JOHN Y.
	Examiner Tamaie IE Karl	Art Unit 2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) This action is FINAL.      2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) 1-3 is/are allowed.
- 6) Claim(s) \_\_\_\_\_ is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 02 March 2000 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) All b) Some \* c) None of:  
1. Certified copies of the priority documents have been received.  
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.

- 4) Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_

## **DETAILED ACTION**

This application is in condition for allowance except for the following formal matters:

### ***Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the conducting layers on the top and bottom surfaces cylinder, the first electrode on the top surface of the center part and a second electrode on the bottom surface of the outer part, and a dc power source must be shown or the features canceled from the claims. No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Specification***

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification. The specification is objected to because of the following informalities: the specification does not have a description of the first electrode on the top surface of the center part and a second electrode on the bottom surface of the outer part as set forth in the claims.

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

***Claim Objections***

Claims 1-3 are objected to because of the following informalities: the acronym DSC, SEPS, and SEBS must be defined in the claims. Appropriate correction is required.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

***Allowable Subject Matter***

The following is an examiner's statement of reasons for allowance: the prior art does not disclose an artificial muscle actuator with one or more thin film layers folded or rolled into the shape of a cylinder forming a center part and outer part of the cylinder, where the film layer has a top surface and a bottom surface coated with an electrical conducting layer. The conducting layer of the top surface connected by a first electrode on said top surface positioned at the center part of the cylinder to a second electrode on the bottom surface at the outer part by a direct current power source. The power supply must be capable of generating electrical potential of a positive electrical charge to the first electrode and a negative electrical charge to the second electrode of at least about 10,000 volts. The film layers having a crystal gel made from one or more copolymers

characterized by sufficient crystallinity as to exhibit a melting endotherm of at least about 250C as determined by DSC curve and said crystal gel being characterized by sufficient crystallinity as to exhibit a melting endotherm of at least about 100C as determined by DSC curve, said crystal gel having rigidities of from less than about 2 gram Bloom to about 1,800 gram Bloom and said crystal gel having sufficient crystallinity so as to exhibit greater strain under elongation than amorphous gels of SEPS and SEBS.

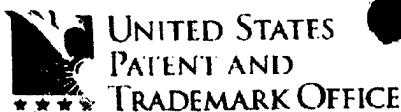
Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karl I.E. Tamai whose telephone number is (703) 305-7066. The examiner can be normally contacted on Monday through Friday from 8:00 am to 4:00 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Nestor Ramirez, can be reached at (703) 308-1371. The facsimile number for the Group is (703) 305-3432. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.

Karl I Tamai  
PRIMARY PATENT EXAMINER  
June 13, 2002

KARL TAMAI  
PRIMARY EXAMINER





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**Quality Assurance Specialists:**

**Don Hajec.....703-308-4075**

**Paul Dzierzynski.....703-308-4822**

If the contents of the attached correspondence have any clerical omissions, e.g., missing references or pages, illegible text, or any other similar errors, please contact us at the number below. We will take appropriate action to expedite the necessary corrections. Also, if you have general questions concerning any application assigned to Technology Center 2800, please contact our Customer Service Center. Questions concerning the merits of the application must be directed to the Examiner in charge of the particular application, then to the supervisor if appropriate.

**TC 2800Customer Service Center      Crystal Plaza 4-6<sup>th</sup> floor, D-corridor**

**Customer Service Representatives:**

**Linda M. Hodge-Taylor      CP4-6-D32**  
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Any matter not satisfactorily resolved by the listed resources should be brought to the attention of the appropriate Director listed below. We appreciate your assistance in helping us help you.

**Directors, Technology Center 2800**

**Semi-conductors, Electrical, Optical Systems & Components**

Sharon Gibson	703/308-0658	2810
Rolf G. Hille	703/306-0658	2820
Richard Seidel	703/306-3431	2830/40
Howard N. Goldberg	703/306-3431	2850/60
Janice A. Falcone	709/308-0530	2870/80